Teenage Fertility in Zambia

Implications for The Future National Population Programme

By

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CONTENTS

CHAPTER THREE: TEENAGE FERTILITY LEVELS: ZAMBIA IN COMPARISON WITH KENYA.

CHAPTER FOUR: SOME EXPLANATIONS OF CURRENT TEENAGE FERTILITY BEHAVIOUR.

CHAPTER FIVE: IMPLICATIONS OF TEENAGE FERTILITY: ZAMBIA

LIST OF TABLES

LIST OF FIGURES

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CHAPTER ONE

INTRODUCTION

1. INTRODUCTION

Teenage fertility behaviour is increasingly becoming an issue of international focus particularly in the Third World Countries (TWCs). Past and present studies are increasingly bringing to light the social, economic, medical and moral implications of teenage fertility behaviour. Hudson and Ineichem (1991, p2) however feels that while teenage fertility in the Third World remains one of the most important topics, 'much important practical work needs to be done; firstly in early pregnancy prevention, and secondly (where prevention has failed), support for young mothers copping with unplanned children.'

In Zambia, the issue of teenage fertility has been recognised as one of those issues requiring special attention. In 1989, Zambia adopted a National Population Policy whose goal is to improve the standard of living and quality of life for all Zambians. One of the specific objectives of that policy relates to teenage fertility and aims to enhance the people's health and welfare and prevent premature death and illness especially among the high health risk group of mothers and children. A mother is classified as in high risk fertility behaviour if she is less than 18 or above 34 years and when the birth interval is less than 24 months. Children under age 5 are also considered to be at greatest risk of dying because their natural immunity is not yet fully developed. In Chapter 5, it will be illustrated that teenagers in Zambia and

their offspring constitute the largest proportion of the population in the high risk group of mothers and children.

The related strategies of Zambia's Population Policy include:-

- intensifying primary health care programme, especially maternal and child health care, so as to reduce the levels of infant, child and maternal mortality;
- formulating and implementing fertility regulation and family planning programmes within the context of the nation's health care and related systems;
- improving the status of women through the removal of various legal, administrative and cultural barriers to their effective participation in national affairs...; and
- expanding the coverage of family life education in all schools and higher institutions of learning so as to prepare the young people for responsible parenthood.

1.1. BACKGROUND TO THE STUDY

One of the major characteristics of Zambia's population is its youthfulness. In 1980, 49 percent of the population was under 15 years and 60 percent was under 20 years. This population structure arises from the high rates of population growth; which increased from 2.5 percent between 1963-1969 to 3.0 percent during the period 1969-1980, and 3.2 percent for the intercensal period 1980-1990. This extreme youthfulness of the population implies that the momentum for future population growth is high even if fertility levels were to decline in the immediate future. Therefore, even if the proportion of teenagers starting childbearing early decreased, the proportions of births contributed by teenagers will still be high due to the high numbers of women

entering their childbearing age. Thus, in terms of numbers alone, young mothers and their children have, and will continue to have a major need for service provision.

Furthermore, the Zambia Demographic Health Survey (ZDHS) results reveal that in 1992, 33,8 percent of the teenagers had started childbearing. In addition, while trends in total fertility rate (TFR) indicated that it was declining, teenage fertility rate was increasing.

1.2. CURRENT DEVELOPMENT POLICY

Before the Movement for Multiparty Democracy (MMD) came to power in 1991, there was heavy involvement of the state in the economy. For instance, there was free provision of health and educational services with a number of subsidies in other sectors. On the whole, a large proportion of the country's financial and human resources were concentrated in the public sector. The new government led by MMD ushered in a new era of an open economy based on private sector initiatives. The cornerstone of the new government's economic restructuring programme is total liberalisation and reduction in government intervention in the economy through free market mechanisms.

1.3. OBJECTIVES OF THE STUDY

Various explanations of teenage fertility behaviour have been put forward and are reflected in the intervention measures that have been advocated. These include:

- introduction of family life education in the school curricula;
- call for increased availability of contraception to adolescents; and liberalisation of abortion law.

However, much of these proposed intervention measures have been made in the absence of a comprehensive study and this would have implications regarding their effectiveness.

The Government of the Republic of Zambia decided to prepare a comprehensive National Population Programme to guide it in the implementation of the National Population Policy. This thesis will discuss the topic of teenage fertility and its implications for Zambia's National Population Programme. The following questions will be addressed in this study :

a) **Identify the size of the problem**

This has implications on resources and hence it is important to first establish the size of problem and then to identify the population at greatest risk.

b) **What are its causes**

As in other fields of study, knowledge of the cause of any incidence is very relevant in designing appropriate solutions.

c) **What are the consequences**

This information is relevant in order to focus the necessary and relevant attention on the particular problem.

d) **Implications**

This addresses the implications of the findings for designing and implementing Zambia's National Population Programme.

1.4. DATA AND ANALYTICAL METHODS

The major data source used in this survey is the Zambia Demographic Health Survey (ZDHS) which was conducted over the period mid- January to mid-May 1992. The primary respondents in this survey were women of

reproductive ages from a nationally representative sample of women aged 15-49 years. This survey involved over 6000 households and 7000 women were interviewed. The strength of various correlates of teenage fertility behaviour will be tested. Projections of the female population for Zambia by year 2000 will also be made with the objective of illustrating how the current structure of the population will affect the numbers of teenagers entering the childbearing age and in turn their total number of births.

For cross-culture comparability purposes, information available on Kenya will be analysed with the aim of testing for similarities and differences between the two countries. This will be important in that conclusions reached about the roles of various variables can be made in a comparable manner.

Data for Kenya is taken mostly from the World Fertility Survey (WFS), with support from other academic publications. Information in the WFS was obtained from responses of women of childbearing age 15-49.

1.5. LIMITATIONS OF THE STUDY

This work is based on secondary data and all the analysis to be made will be limited by the available data. In addition, as is common in retrospective surveys, information obtained from reproductive histories are subject to reporting errors. The possible errors include inacurracies in dating events such as age mis-statement or mis-reporting, and bias resulting from age heaping or digit preference. The ZDHS like most studies define teenagers to be those aged 15-19. This, however, omits the problem among those women under 15 years and hence understates the magnitude of the problem. In Zambia in 1980 for example, 11 percent of women were married by ages 12-14 (CSO, 1991).

CHAPTER TWO

LITERATURE REVIEW: TEENAGE FERTILITY IN THE LESS DEVELOPED COUNTRIES

2. INTRODUCTION

Apart from interest in the relation between marriage and the level of fertility among all women, attention has recently been increasingly focused on marriage and childbearing among adolescents. When motherhood occurs in the teenage years, it is generally considered to be problematic. Awareness of the special consequences for adolescents of early marriage and childbearing has grown. Zabib and Hayward (1993) have noted that the problem of adolescent conception impelled by differing value systems, can be very differently defined. From one perspective, sexual intercourse may be seen as the problem, while from another, it is only when babies are born to adolescent mothers that behaviour becomes a matter of social concern. From another perspective, abortion is the primary issue, from yet another, sexually transmitted diseases, including AIDS. Butler et al. (1981) Simms and Smith (1986) and Kulin (1988) note that in the advanced world teenage childbearing is associated with poor educational outcomes, child abuse, dependence on welfare benefits, abortion, unwed sexual activity and poor educational outcomes for the offsprings.

Each of these concerns have contributed to the emergence of adolescent pregnancy on the social agenda especially in view of the fact that adolescents constitute a significant proportion of many populations. Kulin

(1988,) reports that in 1985, there were just over one billion individuals aged 10-19 world wide, and more than 80 percent of this number were in developing countries where they made up nearly a quarter of the total population. A lot of research, especially in the advanced world, has been conducted aimed at explaining teenage fertility behaviour. A number of programmes aimed at addressing teenage pregnancy have been adopted. However, just as there are diverse explanations to teenage fertility behaviour, so are there diverse views as to what is the best way to intervene.

2.1. LEVELS AND TRENDS IN TEENAGE FERTILITY IN LESS DEVELOPED COUNTRIES

Few studies of adolescent sexual behaviour have been conducted in less developed countries (LDCs) compared to developed countries. It has been widely stated that although teenage childbearing has always been common in most LDCs, it is only recently that it has emerged as a social problem. In the past, it was common for young women to marry at very young ages, and most teenage childbearing occurred within marriage Meekers (1994).

2.1.1 Contribution of Teenage Fertility to Total Fertility

Table 1
Age Specific Fertility Rates (ASFR) For Women Aged 15-19 for the Period 0-4 Years Prior to the Survey Date, by Region and country (Per 1,000 Women)

Region	Age					Age group 15-19 as percentage of total fertility rate
	15	16	17	18	19	
Africa						
Benin	45	69	128	190	286	10.6
Cameroon	102	134	183	244	274	14.6
Cote d'Ivorie	104	172	226	277	311	14.6
Egypt	23	52	105	142	196	9.4
Ghana	39	76	148	203	227	10.5
Kenya	48	129	207	243	284	10.8
Lesotho	13	51	102	154	226	8.8
Mauritania	90	112	175	184	233	12.4
Morocco	14	55	96	142	181	7.9
Senegal	78	162	187	268	266	13.1
Sudan	29	89	106	152	188	9.1
Tunisia	3	4	21	48	109	2.9
Average	49	92	140	187	232	10.4
Latin America and the Caribbean						
Colombia	22	59	95	161	194	10.7
Dominican Republic	34	76	122	194	206	10.8
Guyana	21	72	122	189	220	11.6
Haiti	13	24	50	97	107	5.2
Jamaica	54	110	170	200	248	14.7
Mexico	109	146	199	196	247	9.2
Trinidad and Tobago	23	38	75	117	149	11.5
Average	36	67	112	155	18	10.0
Asia and Oceania						
Bangladesh	140	211	230	272	259	18.0
Indonesia	50	83	130	171	215	13.1
Pakistan	39	104	147	172	229	12.1
Philippines	8	17	53	82	122	5.1
Republic of Korea	0	2	8	22	40	1.4
Average	34	68	103	147	181	8.7

Source: UN (1987) Table 21.

Table 1 shows the ASFR for various regions that were covered by the World Fertility Survey (WFS) which covered 38 countries (12 in Africa, 13 in Latin America and the Caribbean and 13 in Asia and Oceania). In a majority of countries, especially in Africa and in Latin America and the Caribbean, more than 10 percent of the total fertility rate was contributed by women aged 15-19; thus, women below age 20 were important contributors to total childbearing among women aged 15-49 (Senderowitz and Paxman, 1985).

However, just as in the case of fertility rates in other age groups, there was much variation within regions. For example, Cameroon and Cote d'Ivorie had exceptional high fertility among women aged 15 and 16 years of 134 , 183 and 172, 226 respectively. In Latin America and the Caribbean and in Asia and Oceania, only Bangladesh, Jamaica, Jordan, Mexico, and Yemen had comparable high rates among women aged 15 and 16 years. In Bangladesh, Cameroon, Cote d' Ivorie and Jamaica, about 15 percent of the total fertility is contributed by that group, while in the Philippines and the Republic of Korea, the comparable figures are only 5.1 and 1.4 percent, respectively.

Table2
Percentage Who Had Married or Given Birth by Specific Ages, Based on Women Aged 20-24, by Region, Level of Development and Strength of Family Planning Programme Effort

	Married by Age				Given birth by Age		
Region	15	16	18	20	15	18	20
Africa	16	25	46	65	6	28	50
Latin America & the Caribbean	8	15	32	50	4	21	38
Asia & Oceania	18	25	41	54	2	18	36
Level of Development							
i. High	6	13	30	47	2	16	33
ii. Middle High	6	11	26	42	2	14	31
iii. Middle low	14	25	48	68	5	30	53
iv. Low	32	42	60	73	8	33	52
Level of Family Planning Effort							
Strong	8	13	29	45	2	16	33
Moderate	7	13	30	48	1	14	29
Weak	20	28	46	62	5	26	45
Very weak/none	17	26	47	64	5	28	50

Source: UN (1987) Table 55.

Table 2 summarises the mean age at marriage from various regions and the data indicate that in Africa, Asia and Oceania, substantially higher proportions of women married at younger ages; 25 percent by age 16, compared with 15 percent for Latin America and the Caribbean. Among individual countries, differentials are much wider, for example, by age 16, in a

few countries over 40 percent of teenage girls were married (Mauritania, Nepal, Senegal and Yemen, and the extreme case of Bangladesh where 80 percent were married). In contrast, however, in Fiji, the Philippines, the Republic of Korea, Sri Lanka and Tunisia fewer than 8 percent married by age 16. On average in the 38 countries, 22 percent of women aged 20-24 had entered a union by age 16, 40 percent by age 18 and almost 60 percent by age 20. Moreover, 30 percent had their first child by age 18 and nearly 60 percent by age 20 (UN,1987).

Recent results from the Demographic Health Surveys reveal that median age at marriage has risen in most Asian and North Africa. A study by Henry et al. (1979) for example, reveals that among women in Morocco who were ages 40-44 at the time of the survey in 1987, half had married before age 19, but among women in the 20-24 age group, more than half had yet to marry. The study also revealed that marriage age is lowest in Sub-Saharan Africa, a majority of women (above 50 percent) ages 20-24 at the time of the surveys were married before age 20.

Recent Demographic Health Surveys also show that many young people begin sexual intercourse outside marriage. Blanc and Rutenburg (1991) studied sexual experience among never married women. They conclude that in Sub-Saharan Africa sexual experience among the unmarried women was more common. In Kenya and Uganda, for example, more than half of never married women ages 18-19 were sexually experienced compared with 10 percent or less in Brazil, Colombia, Mexico and Peru.

Table 3

Indicators of sexual initiation by country

	Percentage of never-married women who had had sexual intercourse	Percentage of ever-married women who had had premarital sexual intercourse	Percentage of all women who had had pre-marital sexual intercourse
Burundi	5.2	19.7	15.8
Ghana	47.4	60.4	57.8
Kenya	49.7	61.2	58.0
Liberia	81.0	59.2	63.9
Mali	5.7	13.4	13.0
Togo	61.4	65.1	64.3
Zimbabwe	25.8	48.1	42.0

Source: Meekers (1994) Table 2.

Table 3 shows summary statistics for the various indicators of sexual behaviour. The percentage of never-married women who admitted being sexually experienced varies from a low of 5.2 percent in Burundi and 5.7 in Mali to 81.0 percent in Liberia. Likewise, the percentage of ever-married women who reported that they had had sexual intercourse before first marriage varies strongly between countries. In Kenya, Liberia, and Togo approximately six out of every ten ever-married women reported having had premarital sexual relations, while in Burundi and Mali the corresponding figure was less than two out of ten (Meekers, 1994).

2.2. DETERMINANTS OF TEENAGE FERTILITY BEHAVIOUR

'The level of fertility in every society falls below its maximum level through the direct operation of various factors limiting the exposure to intercourse and exposure to conception, and through factors affecting pregnancy outcomes and the length of the post-partum infecundable period' (UN,1987.p165). These have been termed as proximate determinants of fertility, while other influences, such as education or cultural background are termed as indirect , influencing fertility through one or more of the proximate fertility determinants.

2.2.1. Age at Marriage

Marriage takes various forms across countries, cultures and time periods. The term marriage includes consensual unions, thus including couples regularly living together as well as those legally married. The timing and prevalence of unions also vary widely. Nevertheless, the date of entry into first union is an important milestone in a woman's life; it is usually the beginning of regular exposure to the risk of childbearing. Therefore, the more marriage marks the beginning of sexual activity, the more strongly will age at marriage influence age at first birth.

In a study by Pebley et al. (1992) on age at first birth in 19 countries comprising Asian and Pacific, Latin America and the Caribbean, and Middle East, it was observed that Korea had a higher age at first birth of 20.7 years among the oldest cohort and 21 years among the youngest compared to the other countries studied. The authors concluded that the high age at first birth in Korea was as a result of dramatic increases in the age at marriage, rather than from postponement of first birth after marriage.

Rindfuss et al, (1983) also undertook a comparative analysis of the timing of entry into motherhood in Asia. In their analysis, they examined the effects of education, country/ethnicity and age at first birth. The results revealed, among other findings, that age at first marriage is highly correlated with age at first birth and when introduced as a co-variate in a regression equation, age at first marriage mediates practically all the influence of all other social background variables on age at first birth. Meaning that, initial fertility is typically postponed by delaying marriage.

A number of studies have been conducted to try and establish factors which influences age at first marriage. Social background characteristics including social origins and educational attainment have been examined. In a study in Asia by Henry et al. (1979) it was noted that trends towards later marriage have occurred in the context of urbanisation and economic and social development. In the four countries of Asia with high rates of socio-economic development, (Japan, Hongkong, Singapore, and South Korea) 3 percent of women aged 15-19 are or have been married. Whereas in the countries with low socio-economic development, (Indonesia, Bangladesh, India and Nepal) 57 percent were married and in the four countries where some socio-economic rates are intermediate and variable (West Malaysia, the Philippines, Sri Lanka, and Thailand) 11 percent are married. The authors however note that the socio-economic factors are so interrelated that it is not possible to single out one as more important than the others.

The study by Pebley et al. (1992) on age at first birth in 19 countries also revealed that in Asia, the countries that have lower proportions of early first births and that show declines across cohorts had higher levels of female education and are more developed. This observation suggests that as

development proceeds, there will likely be fewer women beginning child bearing at very young ages. Rindfuss et al. (1983) in their analysis which examined the effects of education, country/ethnicity and cohort on age at first birth observed that social background has moderate, yet significant effects upon timing of first birth, and education (particularly secondary school) and pre-marital work experience.

2.2.2. Contraception.

The issue of contraceptive provision to adolescents like that of abortion has raised a lot of debate. Most of the studies available on contraceptive use by adolescents are from the advanced world. However, the WFS indicated that in much of the developing world, contraceptive use was low among married women and the rate for age 15-19 was about half as high as the rate for all married women (UN. 1987).

It has been argued that teenagers are poorly informed, or afraid of being discovered using contraceptives and generally do not use them at all. In an attempt to understand what teenagers themselves feel are barriers to their utilisation of professional contraceptive services, young women in the United States attending 32 family planning clinics nationwide for a first such visit were asked to reply to an anonymous questionnaire that probed their reasons for delay (Zabin and Clark, 1981). Results indicated that some reasons given for non use implied a basic lack of knowledge about the possibility of becoming pregnant. Other researchers (Brooks et al., 1989; and Morrison, 1985) also conclude that teenagers have gaps in basic understanding of reproductive behaviour physiology. Another argument is that those teenagers that are knowledgeable about the use of contraception do not have the ability to internalise that knowledge and act on it.

Phoenix (1991) however, states that lack of knowledge about contraception which is a popular explanation for non-use and inefficient use of contraception is not sufficient to explain why teenage women get pregnant. Furthermore, Jones et al. (1986) using data from their extensive cross country study, concluded that, knowledge of how conception occurs and how to avoid pregnancy is virtually universal even among those less than 18. Thus it appears that most women who become pregnant are not ignorant about either how conception occurs or about the existence of contraception.

According to Zabin et al. (1993) reasons for not using contraception are not confined to lack of awareness of birth control options or of the risks of pregnancy. They include a large measure of fear and misinformation about its use and perceptions of the risks and benefits associated with its use are often extremely negative. Among the adolescents in clinics and school samples in the United States, the belief that birth control is dangerous ranks consistently in the first five most frequently cited reasons for delaying contraceptive use (Zabin and Clark, 1981; Zabin, Stark, and Emerson, 1991).

Brooks et al. (1989) state that adolescents share with adults feelings that contraception is uncomfortable, awkward, or unattractive. Their study reveal that sterilisation is now the most widely used method of birth control among married adults in their 30s in the United States, presumably reflecting the fact that they have many of the same apprehensions and problems with contraception that teenagers do.

2.3. CONSEQUENCES OF TEENAGE FERTILITY BEHAVIOUR

The age at which women have their first child has important consequences both for the demographic characteristics of the population and for women's lives and the lives of their offspring.

2.3.1. Mother

Among the major reproductive and sexually related health hazards that face teenagers are:-

- unwanted pregnancy, including abortion and its complications;
- higher risks of maternal morbidity and mortality;
- sexually transmitted diseases (STDs).

Unwanted Pregnancy

Unwanted pregnancy is one of the greatest problems a young girl can face. Pregnancy may endanger her health, her chances for education and marriage, and many other hopes and plans for the future. She may even be disowned by her family. Consequently, some young women turn to abortion. Information on abortion especially in the developing countries is rare and most of this information is only obtained in the form of hospital statistics on abortion related complications. Henry et al. (1979) note that in Latin America, almost 15 percent of women hospitalised in the 1970s for abortion complications were younger than 19 years old. According to Aggarwal et al. (1982); Akinla (1970); and Binkin et al. (1984) hospital statistics from cities in Kenya, Liberia, Mali, Nigeria, and Zaire show that 38 to 68 percent of women hospitalised with abortion complications were 19 years or younger. In another study in Nigeria by Oronsaye et al. (1983) involving 530 school girls, 30 percent said that they had had illegal abortions.

Maternal Morbidity and Mortality

In 10 hospitals in Zaire, one of every 50 women admitted for complications of illegal abortion died in the hospital (CNND,1985). Other health consequences of teenage pregnancy involve complications during child birth especially when pelvic growth is not complete. Iron deficiency and anaemia arise mainly due to the fact that, although adolescence is often seen as a healthy time in life, young adolescents are in a transitional and demanding stage of growth, and thus face the risk of deficits in nutrition and health (Zabin and Hayward, 1993). Nutritional needs for young people are greater than those for older women. Nortman (1974) analysed age and pregnancy outcome using data from both developing and developed countries, the results showed that women who have first births before their 20th birthday are more likely to experience toxemia, anaemia and diseases of the puerperium.

It has also been observed that lack of perinatal care worsens teenage situation. Singh et al. (1985) noted that young women are less likely than older women to receive perinatal care early in pregnancy due to a number of reasons such as:-

- being ashamed of her pregnancy;
- afraid that her parents will find out;
- may not realise she is pregnant; or
- simply refuse to acknowledge the pregnancy.

Sexually Transmitted Diseases (STDs)

Strobino (1987) has stated that youthful sexual onset is often associated with multiple sexual partners and low socio-economic status, both of which are risk factors for sexually transmitted diseases. The long - term consequences

of STDs are grave. Friberg (1980); and Kramer et al. (1982) state that STDs particularly gonorrhoea and chlamydial infections cause pelvic inflammatory diseases (PID) irreversible damage to the fallopian tubes, ectopic pregnancy, or infertility. A young woman may be rendered sterile before she has ever married or had a child. Although data are difficult to obtain in this area, Porapakkhan et al. (1985) state that in Thailand and Singapore, young people comprise up to 40 percent of clients treated for STDs in government clinics. Di Clemente (1990) puts the figure at 3,500 cases per 100,000 sexually active females as the rate of gonorrhoea in the 10-14 and 15-19 age groups. Attention is now focused on AIDS which is currently incurable and always fatal.

Other serious diseases are linked with frequent early sexual activity. Increasing evidence suggests that early age at first coitus and multiple sexual partners increase a woman's risk of developing cervical dysplasia (abnormal precancerous cells) and cervical cancer, (Barron et al. 1971; and Clarke et al. 1985). In a recent Canadian study, for example, women who started coitus before age 18 were almost twice as likely to have cervical dysplasia as women who started coitus later. At the same time women who reported six or more sexual partners faced a five fold greater risk of dysplasia than women who had had only one partner (Clarke et al. 1985). These serious diseases associated with teenage sexuality have been generally overlooked and the focus has been more on legalising abortion and the provision of contraception and the emphasis on the two will not completely solve the problem.

2.3.2. The Child

'Regardless of age, maternal health prior to and during pregnancy affects the quality of the intrauterine environment and influences foetal development. Maternal malnutrition, illness, substance abuse, and infectious disease (particularly sexually transmitted diseases) can have direct effects on the condition of the fetus and thus can influence its subsequent development' (Zabin et al. 1993, p82). A woman with gonorrhoea or chlamydial infection for example when she gives birth, may produce a child with severe eye infections. If untreated, these infections can cause partial or total blindness (Dupont, 1984).

In a study by Da Vanzo et al. (1983) on how biological and behavioural influences in mortality vary in the first year of life, revealed among other things that; first, the mortality of infants born to very young mothers (aged less than 18) is higher than that of infants born to older mothers, this is concentrated in the first year of life. Second, higher neonatal mortality rates for first-born children are due to their lower birth weights and younger ages of their mothers.

2.3.3. Socio-economic consequences

For very young mothers, the risk of childbearing does not necessarily end with delivery. Social consequences differ depending on whether a young woman is married or not and whether she comes from a poor background. In developing countries where school places are limited with almost no chance of a teenager who drops out from school due to pregnancy going back to school, an early first birth may mean limiting their future. In the developed countries, Card and Wise (1978) state that low educational attainment foreshadows difficulties in the job market.

Teenage mothers are less likely to find stable and renumerative employment than are women who delay childbearing. Accordingly, they are likely to receive public assistance and to end up in poverty. Work by Mc Carthy and Menken (1979); and by Furstenberg et al. (1987), show that the creation of this economic disadvantage, whether temporary or permanent, results in large measure from high rates of marital disruption and instability often following a teenage birth. In most cases they may marry because they are pregnant and so their marriages are likely to fail. This view of teenage marriages being at risk of dissolution is shared by Kiernan(1986) who studied teenage marriage and marital breakdown. Her study also concludes that the risk of marital breakdown amongst women who marry in their teens is substantially greater than that for women who marry at later ages.

2.3.4. Effect on Population Growth

Age at which women have their first child has important consequences both for the demographic characteristics of the population and the rate of population growth. Pebley et al. (1982) state that the effect of early childbearing on the growth of population is twofold. First, in the absence of contraceptives, women who begin childbearing earlier will have more births than equally fecund women who begin at older ages. Even where contraceptive use is widespread, women who have an early first birth may have more children, because they are more likely to attain their desired family size at a younger age; and therefore, be exposed to the risk of contraceptive failure and unwanted childbearing for a longer period of time. Secondly, younger ages at child birth imply higher rates of fertility and higher population growth rates because of shorter length of time between generations, even if average completed family size is constant.

In another study by Pebley (1981) in Costa Rica and Guatemala, he examined the relationship between age at first birth and the tempo of subsequent births. He discovered that women who had an early first birth tended to have subsequent births more rapidly than others regardless of their marital status and socioeconomic status. Westoff (1992) in his report on Africa states that, age at first birth especially in some North African countries has been increasing and he shows that this has contributed substantially to fertility decline.

2.4. INTERVENTION MEASURES

Jones and Battle (1990) have the view that given the adverse effects of teenage pregnancy with all its complications, a multi- disciplinary approach must be taken by professionals to attack this problem head on. They go on to say that instantaneous solutions would not be best but that long range goals must be established and that outcomes of programmes must be shared with all concerned either through mass media, or through related professional vehicles.

Kulin (1988) writing on Africa, equally shares the view that 'a successful approach to these problems will require a multi-disciplinary perspective of adolescents with professional contributions from the area of health, behaviour, education and sociology...,strong institutional facilities are required, backed by committed leadership for the youths.'p727. Kulin makes reference to some intervention programmes in the United States and Europe, such as, carrying services to youths, most importantly in a school setting. Reproductive health remains of high priority in such programmes. Other problems regarding cigarette smoking, substance abuse, communication skills, parental relations and lack of career opportunities have received

strong emphasis. He makes reference to two African countries, Kenya and Zimbabwe which he says could be models for other African countries that are in the process of making a specific address to teenage fertility related problems.

Kulin observes that even in some countries where youth problems are at ministerial level, they have not addressed the health related problems of youth because in economies where health resources are strained, the primary target group is infants and toddlers. Concern has been more frequently directed towards vocational education, employment and culture. Furthermore, although obstetricians / gynaecologists have been most aware of the needs of young people, as they confront illicit abortions, maternal mortality, and sexually transmitted diseases, they have not always felt equipped to deal with the emotional needs of young clients. Kulin states that there is much prevailing thought in Africa, as in the United States, that sexual education of young people will provide a panacea for adolescent pregnancy. Whether the source of knowledge be the family or the school in not an issue, but information will presumably foster a enlightened mind, and perhaps, even enlightened behaviour.

Seen in the context of Africa, Kulin suggest that the United States initiatives which have focused on strengthening job and employment skills, general health care, family support, and recreation may be the most appropriate. Another area he identifies is the role of church organisations that stress morality which he says strikes similar cords to the United States pre-occupation with premarital coitus rather than pregnancy.

Some of the activities being undertaken in Kenya and Zimbabwe include:-

- in Kenya a medical association formed with leadership of obstetricians and gynaecologists with particular interest on adolescents; and in Zimbabwe, a youth advisory service is in existence which runs a drop-in counselling centre and has supplied family life education in schools through-out the country.

Westoff (1992, p19) notes that; ' much of the literature on stimulating fertility decline has been devoted to the provision of family planning. It has been more difficult to envision policies and programmes to increase the age at marriage, and thus the first stage of the fertility transition has received less policy attention than the stage of expanded contraceptive use'. He strongly recommends that changes at the initiation of the reproductive process can exert a significant effect on the level of fertility and the rate of population growth. Westoff further states that in populations with little contraceptive use where fertility largely occurs within marriage, an increase of three or four years in the average age at first union could theoretically result in a 15-25 percent decline in the marital fertility schedule.

Scott. et al. (1981) ask; do women enter motherhood at an early age out of their choice? Do all women have equal opportunity to avoid early parenthood, to acquire skills for self support? They conclude that 'the consequences of early childbearing appear to be sufficiently negative that we doubt it is a status normally entered by informed choice, characterised by equal opportunity, or beneficial to children' (p16).

CHAPTER THREE

TEENAGE FERTILITY LEVELS: ZAMBIA IN COMPARISON WITH KENYA.

3. INTRODUCTION

According to Zabin and Hayward (1993, p8) " When adolescent pregnancy is described as an epidemic, the term is misleading. It implies not only that adolescent conceptions affect large segments of the population but also that they have arisen spontaneously at the same moment in time and can be expected to disappear spontaneously or when we learn how to deal with them effectively. In fact, early conception and childbearing are not a sudden or passing phenomena, they have deep roots in the past and will have ramifications for years to come."

This chapter discusses demographic trends in teenage fertility behaviour in Zambia and comparisons are made with Kenya's experience. It aims to provide a contextual background for discussion of teenage fertility behaviour in Zambia.

3.1. SIZE OF TEENAGE POPULATION.

'One central influence on perceptions of adolescent pregnancy and births is the relative size of teenage population' (Zabin and Hayward, 1993, p14). The size of the teenage population is important because it has an impact on the total number of births to this age group and on the proportions contributed by teenagers to the entire childbearing age. Both Zambia and Kenya have

highly youthful populations characteristic of countries with very high fertility.

Table 4 shows the age distribution of women aged 15-49 in 1980 and 1992 for Zambia. The figures show that the proportion of teenage population to that of all women of childbearing age increased from 24.6 percent to 28.1 percent, a rise of 11.4 percent between 1980 and 1992. In comparison with other age groups, the teenage population has not only had the highest increase in its size, but also constitutes the largest cohort of women in childbearing age.

Table 4

Percentage Distribution of Women of Reproductive Age, Zambia 1980 and 1992

Age	1980 Census	1992 ZDHS
15-19	24.6	28.1
20-24	20.0	20.4
25-29	16.3	16.7
30-34	13.3	13.0
35-39	10.5	9.3
40-44	8.6	7.2
45-49	6.7	5.4
Total	100.0	100.0

Note: The ZDHS rates refer to the three year period preceding the survey.
Source: Gaisie et al. (1992), Table 2.8.

3.2 TRENDS IN TFR: ZAMBIA AND KENYA

In the period 1969 to 1990, TFR fluctuated from 7.1 in 1969 to 7.2 in 1980 and 7.0 in 1990. The results of ZDHS show a further decline to 6.5 in 1992. Thus the TFR declined by 9.7% in a decade. The total fertility rate for Kenya declined even more rapidly from 8.2 in 1977/78 to 6.6 in 1989, a decline of 19.5% over a decade.

3.3. TEENAGER FERTILITY AS A PROPORTION OF TFR

Table 5

Age-specific fertility rates, Zambia, 1980 and 1992

Age group	1980 census	Proportion of TFR	1992 ZDHS	Proportion of TFR
15-19	153	11.1	156	12.3
20-24	318	22.2	294	23.1
25-29	323	22.2	271	21.5
30-34	289	19.5	242	10.5
35-39	225	15.3	194	15.4
40-44	115	8.3	105	7.7
45-49	17	1.4	31	3.1
TFR 15-49	7.2	100	6.5	100

Source: Modified from Gaisie et al.(1992) Table 3.1.

Table 5 lists age specific fertility rates for Zambia and illustrates that fertility rates have dropped for almost all age groups with the largest proportional drop for age group 30-34. However, age groups 15-19 and 45-49 have not shown a decline in the same period. Thus, while the TFR showed a decline of about 9.7 percent from 1980 to 1992, teenage fertility increased by about 2 percent.

Table 6

. Age-specific fertility rates from various surveys and censuses, Kenya.

Age	1969 census	1977/78 KFS	1979 census	1984 KCPS	1989 KDHS
15-19	111	178	179	143	152
20-24	284	342	368	358	314
25-29	290	357	372	338	303
30-34	253	293	311	291	255
35-39	200	239	226	233	183
40-44	121	145	105	109	99
45-49	60	59	14	66	35
TFR 15-49	6.6	8.1	7.9	7.7	6.7

Source: Modified from Njogu et al. (1991) Table 1.

In the case of Kenya, data presented in Table 6 indicate that the pattern of ASFR has not changed significantly over the past two decades. Like Zambia, child bearing begins in teenage ages and reaches its peak between ages 20 and 30 and then drops rapidly after age 40. However, teenage fertility in

relation to overall fertility in Zambia has followed a different pattern to that of Kenya.

The proportion of teenage fertility to total fertility for Zambia rose from about 11.1 percent in 1980 to 12.3 percent in 1992. In the case of Kenya, while fertility for ages 15-19 showed a decline from 179 in 1979 to 152 per thousand in 1989, its proportional contribution to total fertility of about 11.3 percent remained stationary. This illustrates the point that the youthfulness of the population will result in more women being in the high risk fertility behaviour group despite the drop in the overall fertility rate.

A comparison of the rates of change in teenage fertility with the rate of change in TFR for Zambia and Kenya , indicates that Zambia, which has a higher proportion of TFR contributed by teenagers, has also experienced a rise in the adolescent fertility. Whereas in Kenya, where both teenage and overall fertility rates have declined, teenage fertility rate has decreased at a somewhat lower tempo than that for overall fertility.

3.4. AGE AT FIRST BIRTH.

' The timing of this event, measured by mother's age, has strong effects on both individual and aggregate levels of fertility as well as broader implications of women's roles and social change in general' (Hirschman and Rindfuss, 1980 ,p507).

Figure 1. Percentage distribution of women by age at first birth, according to current age , Zambia 1992

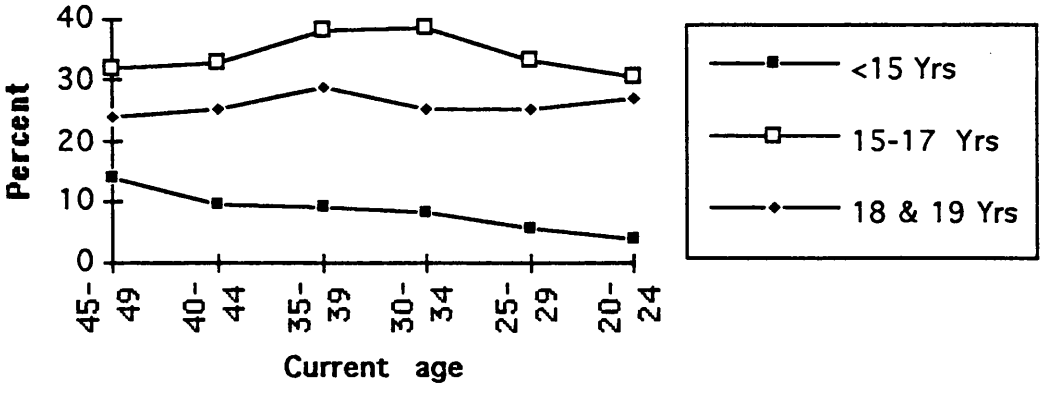


Figure 1 shows that younger cohorts delay their first birth more than the older cohorts. The proportions of women for example, who start childbearing in their teenage years have declined from 76 percent for women aged 35-39 to 61 percent for women aged 20-24.

In the case of Kenya, data reveal that there has not been much significant change in the age at first birth between the older and younger cohorts. In 1977/78 for example, age at first birth for ages 15-24 was 19.2 while in 1989 the KDHS shows that it rose only slightly by 4 months.

3.5. AGE AT MARRIAGE.

Figure 2. Median age at first marriage by residence, Zambia.

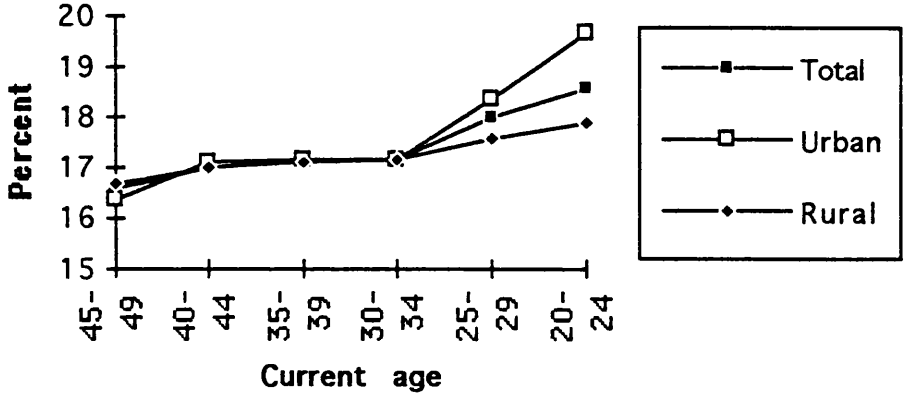


Figure 2 shows that age at marriage in Zambia has been increasing. The median age at first marriage rose from 16.6 years for age group 45-49 to 18.6 years for age group 20-24. It has been further observed that the rise in age at first marriage was highest among the urban segment of the population.

Data in Table 7 show that Kenya had a similar trend to that of Zambia with rising ages at first marriage. The KDHS data on the median age at marriage illustrates that the median age at marriage for the age group 35+ was 17.8 while that for the age group 15-19 it was 20.2 years.

Table 7.

Life table estimates of median age at first union and first birth, Kenya 1977/78 and 1989.

	First Union		First Birth	
current age	KFS	KDHS	KFS	KDHS
15-24	19.0	20.2	19.2	19.6
25-34	17.8	18.3	18.7	18.5
35+	17.9	17.8	19.5	18.8
Type of residence				
Urban	18.8	19.8	19.4	20.0
Rural	18.2	18.7	19.1	18.8
Total	18.3	18.8	19.1	19.0

Source: Adopted from Njogu et al.(1991) Table2.

'Whether teenage women are married or single makes a difference to their likelihood of becoming pregnant and how pregnancies are resolved after conception' (Phoenix, 1991, p51). Age at marriage affects fertility a number of ways. For example in countries where premarital fertility is uncommon, delays in marriage cause a temporal reduction in the number of women who are at risk of childbearing.

In Zambia, the 1980 census revealed that the proportion of teenagers married in 1980 was 29 percent (CSO, 1991). The ZDHS data indicated that this proportion decreased to 26 percent in 1992. Despite this decline in the proportions of married teenagers, the majority of conceptions and births to women under age 20, are to those who are married. In 1992 for example, out of 1444 teenagers who never had a child, only 13.2 percent were married teenagers. A further comparison of the number of births between married and unmarried teenagers reveal that the married ones had already experienced two births while the unmarried had only experienced one birth.

Table 7 shows that although the younger women in Kenya are marrying later than the older women, this has not been accompanied by corresponding later births. The median age at first union for example, increased by 0.5 years between 1977/78 and 1989 (18.3-18.8 years, respectively) while, age at first birth remained at about 19 years. In 1989 age at first birth was slightly lower than at first marriage. When one compares the data of 1977/78 and 1989, an observation is made that premarital sexual activity does occur and is actually increasing. This implies that date of marriage may not be a good indicator for measuring the onset of sexual activity in Kenya.

3.6. SEXUAL ACTIVITY AMONG TEENAGERS

Table 8

Percentage of women who were first married and had first intercourse by exact age 15 and 18 according to current age, Zambia 1992.

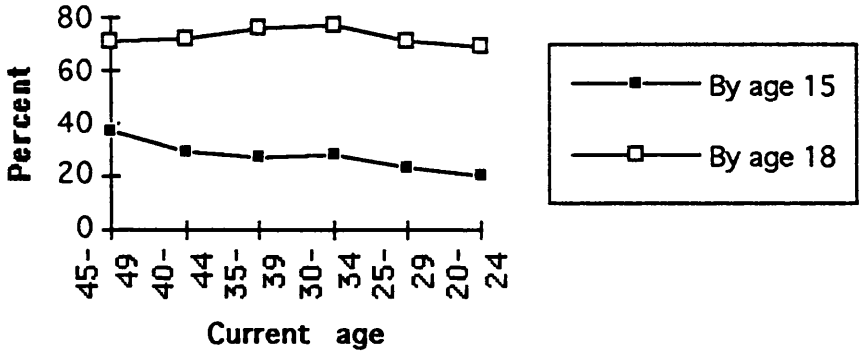
	percentage of women who were married by exact age		median age at first marriage	percentage of women who had first intercourse by exact age		median age at first intercourse
Current age	15	18		15	18	
15-19	4.2	NA	a	19.2	NA	a
20-24	9.0	43.3	18.6	20.2	68.9	16.6
25-29	12.0	50.4	18.0	23.3	70.9	16.4
30-34	17.7	60.6	17.2	28.1	77.1	16.0
35-39	19.3	63.9	17.2	27.5	75.8	16.2
40-44	22.6	62.9	17.0	38.9	72.5	16.3
45-49	31.1	64.8	16.6	36.8	71.4	16.0

Source: Adopted from Gaisie et al. (1992) Tables 5.4 and 5.6.

Sexual activity helps in understanding the sexual behaviour of adolescents. In case of Zambia, Table 8 and Figure 4 reveal that age at sexual onset among teenagers has been increasing with coital activity peaking among the older teens. Further more, an increase in premarital sexual activity was

observed. Among women aged 45-49, only 5.7 percent had first sexual intercourse outside marriage compared to 11.2 percent of age group 20-24.

Figure 3. Trends in sexual onset, Zambia 1992.



Meekers (1994) reports on a study in Kenya of girls in teacher training colleges which shows that 74.4 percent of all the women, and 68.2 percent of the unmarried had had premarital sexual experience. The median age at first intercourse of this sample of college girls was 18. Thus, in both cases, Zambia and Kenya has experienced an increase in premarital sexual activity in their teenage populations.

3.7. AGE DISTRIBUTION

So far trends in teenage fertility have been discussed in general terms. However, it is important to note that women who make up this age group are not homogeneous. They constitute primarily of the married, unmarried, early teens and older teens with varying background characteristics. Social, health and psychological consequences are generally acknowledged to be much more serious among the younger teens and those who are socially and economically disadvantaged. However, the available data do not enable one to go into deeper analysis of all aspects of their heterogeneity and

further research is needed in this area in order to identify teenagers at greatest risk.

Figure 1. showed that the births to women aged less than 15 has shown a declining trend, a trend which is different from that of the other teenagers. Teenage mothers in Zambia seem to be predominantly 18 and 19 years old, which means that almost 70 percent of teenage childbearing belong to these ages. In the case of Kenya, in 1977/78, the proportion of births by younger teens (15-17) was 4.7 percent, which was almost half of the proportion of all teenagers' contribution to TFR. However, the high youthfulness of the population may imply a rise in the proportions of births by teenagers (15-17 years) despite the drop in their fertility.

3.7.1. Distribution By Residence.

In terms of regional variations, data available suggest that teenage fertility levels and trends are not evenly distributed. The extreme case for teenage fertility are for those residing in rural areas and those with primary or no education. In the case of Zambia for example, urban areas experienced a rise in the median age at first marriage from 16.4 years for ages 45-49 to 19.7 years for ages 20-24 , an increase of about 3.3 years. The age at first marriage in rural areas however, rose from 16.7 years for ages 45-49 to 17.9 years for ages 20-24, an increase of 1.2 years.

Table 11 in Chapter four indicates that in Zambia 40 percent of the teenagers who reside in rural areas had started childbearing compared to 28.5 percent for those residing in urban areas. Differences by level of education were even wider: 45.5 percent of the teenagers with no education had started childbearing compared to 21.2 percent of those with secondary education.

3.8. CONCLUSION

From the above discussion, the following conclusions can be made:-

- The structure of the population characteristic of those with high fertility rates has meant a very broad base. This is reflected in the numbers entering the childbearing age 15-19, making it the largest group in the child bearing age 15-49. It is anticipated as will be illustrated in Chapter 5 that the numbers entering the childbearing age 15-19 will continue to grow due to this inbuilt momentum.

- This youthfulness of the population also implies that even if teenage fertility were to decline, the proportions of birth contributed by teenagers will still be high due to their large numbers. These large numbers of teenagers and their offspring will have implications on the social services this high risk group of the population require.

It was also observed that age at first marriage is rising, but as it rises, premarital sexual activity is also rising. The fact that most of the sexual activity among teenagers is without protection, this rise in premarital sexual activity will have implications on the births to teenagers and numbers of single parents. Single parenting adds on another disadvantage to that which is as a result of age.

-The general observation however, is that the problem of early childbearing is in existence in Zambia and is not likely to disappear quickly due to current high levels in fertility.

CHAPTER FOUR

SOME EXPLANATIONS OF CURRENT TEENAGE FERTILITY BEHAVIOUR

4. INTRODUCTION

By age 19, 33.8 percent of the teenagers in Zambia had started childbearing (Gaisie et al. 1992). 'Early motherhood is merely one instance where a social problem is identified' (Seidman and Rappaport, 1986). Zabin and Hayward (1993, p27) state, 'Young people are subject to personal pressures arising from the process of physical maturation and from their emerging mental and emotional needs. But simultaneously, each individual also experiences the diverse expectations that arise from a specific social context, a context that conveys implicit norms some of which are encouraging, some discouraging, of early sexual contact.'

In order for us to design intervention measures that are effective, it is important to understand the correlates of early sexual exposure. Not much research has been conducted regarding teenage fertility behaviour in Zambia, however, on the basis of what is known especially from the ZDHS, one should be able to construct various hypotheses which could provide the focus for this discussion.

This chapter will seek to assess the strengths of the various associations suggested in the ZDHS results. Therefore the beginning of childbearing as measured by the age of a woman at the birth of her first child will be the dependent variable and the independent variables will be level of education and residence (urban and rural) for this analysis.

4.1. AGE AT FIRST MARRIAGE AND AGE AT FIRST BIRTH

Marriage in Less developed countries as observed in Chapter 2 takes place at an early age. Marriage and childbearing are seen as important and obligatory stages in the transition from childhood to adulthood.

The more marriage marks the beginning of sexual activity, the more strongly age at marriage will influence age at first birth. Women's age at first marriage will be examined to see what role it plays in influencing teenage fertility behaviour. A statistical correlation will be assessed between age at first marriage and age at first birth and also with age at first sexual intercourse. If age at first marriage is highly correlated with age at first birth, then it will be interpreted that the independent variables, education and residence, that will be examined, may operate indirectly through marriage.

Table 9

Mean age at first marriage and age at first birth for women aged 20-49, Zambia 1992

	Total Zambia		Rural		Urban	
	Mean	Std. deviation	Mean	Std. deviation	Mean	Std. deviation
Age at first marriage	17.4	0.73	17.2	0.43	17.6	1.19
Age at first birth	18.5	0.37	18.5	0.23	18.6	0.54
Correlation	0.85		0.67		0.94	

Source: Author's calculation based on Gaisie et al. (1992) Tables 5.4 and 3.9.

Table 9 show that the correlation between age at first birth and age at first marriage is fairly high. This suggests that there are few efforts to delay fertility amongst newly married couples through contraception and that marriage and fertility are more likely to be jointly planned.

The results in Table 9 are in accord with information in chapter 3 which revealed that, out of the 671 of the teenagers that had started childbearing, 78.4 percent were married. An indication that much of childbearing in Zambia still occurs within the context of marriage. Table 10 also shows that among the teenagers that had started childbearing, it is the married teens that had more than one child. An indication that age at first marriage plays a significant role in the levels and overall teenage fertility. The WFS presents similar findings for Kenya on the role of marriage in influencing levels of teenage fertility. In Kenya, the WFS results indicate that the mean number of ever born children to ever married women aged 45-49 was highest among those that had married under age 17 (8.2 children) compared to 6.2 children for those that married after age 25. Thus, confirming further the strong relationship between age at marriage and teenage childbearing.

Table 10

Proportions of births to married and unmarried age 15-19, Zambia, 1992

Number children ever born to women 15-19	All women	Married women	Proportion of all births	
			Married	unmarried
0	72.8	36.1	13.2	86.8
1	22.5	48.8	57.6	42.4
2	4.0	13.3	100.0	0.0
3	0.6	1.8	75.0	25.0

Source: Modified from Gaisie et al. (1992) report, Table 3.6.

4.2. FACTORS INFLUENCING THE ONSET OF CHILDBEARING

The trends and levels in teenage fertility, show that the highest rise in age at first marriage has occurred in urban areas where the median age at marriage has risen by more than 3 years between cohorts of women age 20-24 and 45-49. In Kenya, for example, the highest rise has also been experienced in urban areas. Age at marriage rose 7 months more in urban areas than in rural areas between 1978 and 1989 (KFS, 1977/78; and IRD et al. 1989). The level of education reached also seems to have a similar influence, i.e. delaying the onset of childbearing as one goes higher on the education ladder. Data in Table 11 will be used to test using Chi square, the strength of the associations between the onset of childbearing and the two variables, education and residence (that is rural and urban).

Table 11

Percentage of teenagers 15-19 who are mothers or pregnant with their first child by selected background characteristics, Zambia 1992

Background characteristics	Percentage who are: Mothers	pregnant with first child	Percentage who have begun child-bearing	Number of teenagers
Age				
15	1.9	3.4	5.3	384
16	8.7	6.1	14.7	427
17	22.1	7.8	29.9	392
18	44.2	10.2	54.3	380
19	59.9	5.7	65.6	401
Residence				
Urban	22.6	5.8	28.5	1075
Rural	32.5	7.5	40.0	907
Province				
Central	31.9	7.8	39.8	155
Copperbelt	23.8	4.3	28.0	535
Eastern	35.7	8.1	43.7	193
Luapula	29.5	6.6	36.1	127
Lusaka	22.0	8.5	30.5	320
Northern	26.8	9.8	36.7	202
North-Western	28.7	3.2	31.9	50
Southern	29.5	5.0	34.4	311
Western	27.6	8.7	36.4	91
Education				
No education	37.3	8.2	45.4	211
Primary	29.0	7.6	36.5	1293
Secondary	17.9	3.3	21.2	479
Total	27.2	6.6	33.8	1984

Source: Gaisie et al. (1992), Table 3.10.

4.3. BACKGROUND CHARACTERISTICS OF TEENAGERS WHO HAVE STARTED CHILDBEARING

4.3.1. Education

Table 11 shows that 45.4 percent of teenagers that had started childbearing had not been to school. Among those teenagers that had been through the formal education system, 36.5 percent had attained primary education and 21.2 percent had attained secondary education. A Chi square test for significance of education in delaying onset of childbearing reveals that at 2 degrees of freedom the critical value of Chi square is 13.82 at the 0.001 level of confidence. The calculated value of Chi square in this case is 18.73. One is therefore able to state confidently that the onset of childbearing differs significantly with level of education. Further analysis indicates that secondary education contributes more to the value of Chi square, which is in line with other research findings that suggest that it is secondary education or higher that exerts more negative influence on fertility. However, as will be noted from the table, the majority of teenagers (65.2 percent) have only reached primary level of education. This high proportion of teenagers who have only attained primary education can be attributed to the widening gap between enrolment rates and progression rates. In Zambia for example, enrolment rate for females aged 6-15 in 1992 was 69.4 percent. However, the enrolment rate for females aged 15-20, which represents the age group of those in upper secondary school drops to 22.9 percent. This may suggest that while pregnancy has been attributed to be one of the major causes for dropping out of school by teenagers, in the case of Zambia the situation suggests that this effect is minimal because very few women stay at school long enough. At the same time, economic shifts have silmutaneously led to a need for longer educational careers. Meanwhile high unemployment

even to the highly educated is a common feature, and to those that drop out of the school system their chances of employment are even worse.

Data for Kenya in Table 12 give a similar indication on the association between education and fertility.

Table 12

Proportion of women ever married in selected age groups and singulate mean age at marriage, by level of education, Kenya (WFS)

Level of education	Ever-married women in age group			Singulate mean age at marriage
	15-19	20-24	25-29	
Zero	61.4	91.6	97.2	17.2
One to three	36.6	90.0	99.4	18.7
Four to six	21.0	83.3	96.2	19.5
Seven or more	15.8	90.5	90.5	21.8

Source: (UN 1987) report, Table 170.

4.3.2. Residence

Table 11 shows that 40.0 percent of teenagers residing in rural areas had started childbearing compared to 28.5 percent of those in urban areas. A Chi square test for significance of residence's influence on teenage fertility behaviour reveal that with degrees of freedom at 2, a Chi square value of 13.82 is significant at the 0.001 level. As the calculated value of Chi square was 19.54 one would therefore conclude that residence (urban or rural) is

significantly related to onset of childbearing in Zambia. Further analysis reveals that even among provinces, the two highly urbanised provinces (Copperbelt and Lusaka provinces) have slightly lower proportions of teenagers that have started childbearing.

The available literature has suggested that the differences between urban and rural areas may reflect the socioeconomic characteristics of these residencies. It is assumed for example that urbanisation has a positive impact on fertility reduction because urban dwellers have better access to social services, mobility and formal employment. In Zambia this is evidenced in the marked differences in education levels in respondents by residence. A comparison of proportions of teenagers' level of education by residence reveals that 26.5 percent of teenagers residing in areas were without education compared to 7.0 percent of those residing in urban areas. Similarly for those that had attained secondary education, there were only 8.6 percent of teenagers from rural areas compared to 34.9 percent from urban areas.

4.4. CONTRACEPTION

It has been argued that teenagers are poorly informed, afraid of being discovered using contraceptives and generally do not use them at all. Even when knowledge exists, it is argued that there are psychological factors which affect their ability to use them. Insufficient knowledge about contraception is usually given as one of the major explanations as to why pregnancies occur to teenagers. Therefore, availability of contraceptives to young people has been emphasised as a means for controlling teenage fertility.

Data from the ZDHS, reveal that knowledge of contraceptive methods and their sources is widespread for all cohorts and only a small margin exists between rural and urban areas. Nonetheless, the rural : urban information gap widens when one is considering modern contraceptive methods . Contraceptive use in Zambia is low not only among younger women but older women also. Probably similar reason for non-use by older ages could apply to young women. Use of contraception rises with increase in level of education. The ZDHS(1992) reveals that, among those without education, only 8.0 percent were using any method out of which only 2.7 percent was modern, compared with 27.1 and 20.7 percent respectively for those with secondary education. Those with higher education had a wider margin, 58.5 percent and 49.6 percent respectively, while those with primary level, the category in which the majority of women are found, use was 12.8 percent for all methods and 6.3 percent for modern methods.

In the case of Kenya contraceptive prevalence for all women though higher than Zambia, was still low by international standards. However, for age group 15-19, Kenya rates are even lower than those of Zambia with prevalence rates of 2 percent for modern methods compared to 7 percent for all women according to WFS data. Although the KDHS data show an increase in the general level of contraception, the younger women still represent the lowest users, 13 percent using any method compared to 28 percent for all women. However, when one compares the percentage of those that are knowledgeable about contraception between the teenagers and older women, there is not much of a difference, 90 percent for age 15-19 and 93 percent for all women.

4.4.1. Contraception Among Married and Unmarried Teenagers

One would expect that when teenagers get married their use of contraception should reflect that of other older women because now they are in what is termed as a socially acceptable institution for sexual activity and childbearing. Therefore, there should be no fears of being discovered using contraception. However, contrary to expectations, the ZDHS data reveal that use of contraception among the two groups does not differ much. Among the married teenagers for example, 91.3 percent were not using any contraception while, for the unmarried teenagers it was 98.3 percent. An indication that though use of contraception is slightly higher for the married teenagers than that for the unmarried, both represent very low use.

The ZDHS report also shows that low use of contraception among the teenagers, can also be explained by low levels of discussion of family planning by couples compared with women who are in their thirties. Thus further study on use of contraception among the teenagers, would probably bring to light more aspects of teenage fertility behaviour. However it should be noted that factors that are responsible for very low contraceptive rates by all women in Zambia (15 percent modern and 6 percent traditional) may equally apply to teenagers.

4.5. CONCLUSION

This Chapter, while having not exhausted all explanations to teenage fertility behaviour in Zambia due to limited information, the following associations have been established to have significant influence on the onset of fertility among teenagers:-

- Marriage is still a predominant institution within which early childbearing occurs. The high correlation between age at first marriage and age at first birth emphasises the fact that, marriage increases the chance of exposure to childbirth. This means that, the proportions of teenagers ever married and age at first marriage have significant implications on the levels of teenage fertility.

- The background characteristics that have been examined, (education and residence) have been found to be significantly related to the onset of childbearing. It was also established that it is higher education which exerts greater influence in delaying onset of childbearing. The role of these background variables through the proximate determinants of fertility such as age at marriage and contraception has been established. Therefore the fact that the majority of teenagers are at a greater risk by lacking higher levels of schooling, implies a need to readdress this situation.

- With regard to contraception, while it is evident that both married and unmarried teenagers are lowest users of contraception, it has also been established that the low use of contraception by teenagers reflects general low use by all women of childbearing age15-49. This therefore, suggests that the obstacles to contraceptive use by older women could also be applicable to the teenagers.

CHAPTER FIVE

IMPLICATIONS OF TEENAGE FERTILITY: ZAMBIA

5. INTRODUCTION

This chapter will address the issue on why there is need to be concerned about teenage fertility behaviour. The consequences of teenage fertility behaviour are felt by the teenage mother herself, the child and the society. It has been stated that grouping teenagers in one category has often under represented those at greatest risk as the degree to which these ills are manifested will mostly depend on the environment in which teenage child bearing occurs, such as, poor background. Due to absence of data on social class, women's education will be associated to class and this idea is borrowed from Schoemaker (1991) who sees the variable education as not simply an indicator of how much a woman has learnt in most of the developing countries, but that access to education is determined to a great extent by social class.

While residence may represent social class, it will be mainly regarded as a proxy for physical access to modern health and related services. In this chapter, an assessment on what the teenage fertility behaviour implies for the mother, the offspring and the society and on the overall goal of raising the quality of life for all Zambians will be made.

Projections of the female population will also be made and an estimation of births with the objective of illustrating how the youthfulness of the population affects population composition. Composition of the population is very relevant for planning purposes as each age group has specific needs.

Interest is particularly central on the female population as it determines the nation's reproduction rate.

5.1.CONSEQUENCES ON THE MOTHER

5.1.1.Health

Chapter two dealt at length on issues of health consequences which are manifest even before the teenager becomes pregnant (STDs) and those manifested later in prenatal and the actual process of child delivery. Information on sexual transmitted diseases is not available for Zambia. However, up to 1992, a total of 1472 AIDS cases were reported officially for the age group 15-19 years (UNFPA, 1992).

Information on perinatal care suggests that teenagers are at greater risk relative to other age groups. In chapter two, various reasons were put forth as to why an optimal level of care for pregnant teenagers is crucial. However, a look at the ZDHS data on ante-natal care in Zambia indicate imbalances in the provision of services by residence and level of education. Although this available information does not provide usage of services by age, in Chapter two it was established that the largest proportion of teenagers that had started childbearing were from rural areas. In terms of levels of education, those without education in urban areas were 7.0 percent compared to 26.5 percent in rural areas. Since the ZDHS results show that women with no education are more likely not to receive antenatal care (2 percent compared to 20 percent of women with secondary education), one would then conclude that most teenagers who are in the 2 percent category reside in rural areas, thus confirming that environment, like age, in which childbearing occurs may put a teenager at greater disadvantage . Therefore, a teenager with lower or

no education and residing in a rural area is at a greater risk because the availability of good antenatal care and its utilisation early in pregnancy are both related to such characteristics as low educational levels and rural residence.

Another aspect related to perinatal health of a teenager is the nutritional status during pregnancy. Teenagers, especially those under 17 years, are still growing and are therefore competing nutritionally with their fetuses for physical growth and general development . Thus, when compared to the older pregnant women, pregnant teenagers have a higher level of nutritional requirement. An analysis of nutritional status and dietary condition in Zambia revealed a widespread prevalence of malnutrition among pregnant mothers (Kwofie et al. 1983). It was discovered that a majority of pregnant women suffer from protein deficiency. Thus in a situation were general nutritional status is low, the optimal level of prenatal care is very crucial especially among teenagers whose age put them at greater disadvantage than the physically mature women. Unfortunately, as quoted in chapter two from various studies, teenagers are most likely to start antenatal visits in later stages of their pregnancy.

Apart from the feared health risks due to improper perinatal care and malnutrition, the ZDHS also reveals that there is a direct association between residence and level of education of mothers and vaccination against Tetanus, an important component of antenatal care (Table 13).

Table 13

Percentage distribution of women without Tetanus toxid injections in the five years preceding the survey by selected background characteristics, Zambia 1992.

Background characteristics	% of women with no vaccine
Mother's age at birth	
<20	19.1
20-34	17.1
35+	22.0
Residence	
Urban	12.8
Rural	23.5
Mother's education	
No education	32.8
Primary	17.0
Secondary	10.8

Source: Modified from Gaisie et al. (1992) Table 8.3

The possible explanation of this disparity in women that had Tetanus vaccinations may lie in the fact that women with higher education usually understand and appreciate better the benefits of such services and/or they may have greater access to modern medical care which is concentrated mainly in urban areas (34.9 percent was in urban with secondary education compared to 8.6 percent in rural areas). This reflects the flaw in the health service provision that has been biased towards urban areas in Zambia. Examination of the distribution of health facilities reveals the reason for poor

accessibility to health services experienced in rural areas compared to urban areas. (Table14).

Table 14

Some indicators of health service coverage, Zambia 1988.

	% population covered	
	Urban	Rural
Health service	1988	1988
Local health service	100	50
Safe water	76	43
Sanitation	77	34

Source: Adopted from MOH (1991) Table 9.

Another important aspect in reducing health risks in teenage mothers, especially during delivery, is to make available in greater proportions than is seen at present, better medical facilities. Proper medical and hygienic conditions during delivery can greatly reduce the risks and complications usually experienced during delivery and the risk of infections that lead to death or serious illness either to the mother or baby. In Zambia, according to ZDHS, close to 49 percent of births to teenagers occur at home. This proportion is similar to the overall proportion of women aged 15-49, whose births are performed at home. The Ministry of Health, in their health reform document (MOH 1991) acknowledge the impact that the current severe economic recession in Zambia has on the access and quality of health services . Meanwhile, according to projected population of teenagers (Table

16), a rapid rate of increase of teenagers entering child bearing age will be experienced in the already youthful population and this change will put further strain to the current inadequate health service.

The implications of the growing proportions of teenagers entering child bearing age on social service provisions requires to be addressed. Both the National Population Policy and the National Health Policy emphasises the need to focus on the high-risk population in order to achieve the 'Health for All' strategy by the year 2000. The group of teenagers of child bearing age makes one of the biggest demands on health services. If the current high rate of fertility and proportion of teenagers entering child bearing age among teenagers does not decline, the need to design interventional measures to reduce this trend, cushion and reduce the health risks experienced both by the mother and child will be urgently required.

The available statistics from (MOH 1991) reveal that, among the top ten causes of hospital admission in 1988, pregnancy related complications ranked the fourth while in health centre admissions, it ranked second. Just to maintain current services, government spending will have to rise in real terms as the present level of MCH is inadequate, with about 50 percent of deliveries at home. The relationship between education of the mother and place of delivery is striking. The proportion of births delivered in a health facility increases from 22 percent among women with no education to 96 percent among women with higher than secondary education. This situation, emphasises the fact that raising women's status is crucial in liberating women from a number of ills. The effect of education has been observed throughout this study on, fertility levels, use of family planning, utilisation of health facilities and enhancing child survival as well. Thus non-school going teenagers residing in rural areas require greater attention.

5.1.2. Single Parenthood

Chapter three's consideration of the level of teenage fertility observed that while much of childbearing still does occur within marriage, premarital sexual activity was increasing. This increasing trend means an increased risk of premarital pregnancies. Thus, a likelihood of more children being raised by single parents, who are predominately teenagers. In Zambia, the proportion of teenagers that were single parenting was 27 percent among the women aged 15-19 that had ever borne a child. The fact that a young mother is more likely to parent alone should give cause for concern for the physical, emotional and social health of both the mother and child.

5.1.3. Child

As indicated in chapter two, the intrauterine environment influences the quality of feotal development. Thus, the proportion of births to teenagers under 17 years represents the proportion of offsprings at risk of retarded growth, low birth weight and other related ills. The relationship between the mother's age at the time of birth and childhood mortality shows that mortality occurs for children of very young mothers and those nearing the end of the reproductive lives. The situation in Zambia is evidenced from Table 15 .

Table 15

Infant and child mortality rates for the ten-year period preceding the survey, by selected demographic characteristics, Zambia 1992

Demographic characteristics	Neonatal mortality (NN)	Postnatal mortality (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Age of mother at birth					
<20	53.3	69.8	123.2	110.1	219.7
20-29	36.0	56.4	92.4	85.0	169.5
30-39	34.4	52.7	87.1	76.2	156.6
40-49	(53.8)	(47.7)	(101.5)	(79.8)	(173.2)
Birth order					
1	50.8	70.8	121.5	104.6	213.4
2-3	35.2	60.9	96.2	92.6	179.8
4-6	35.3	50.7	86.0	74.8	154.4
7+	42.6	51.3	93.9	84.9	170.8
Previous birth interval					
< 2 yrs	70.0	85.8	155.8	104.6	244.0
2-3 yrs	28.3	48.2	76.5	80.1	150.5
4 yrs +	20.1	36.0	56.1	69.5	121.7

Source: Modified from Gaisie et al. (1992) Table 7.4

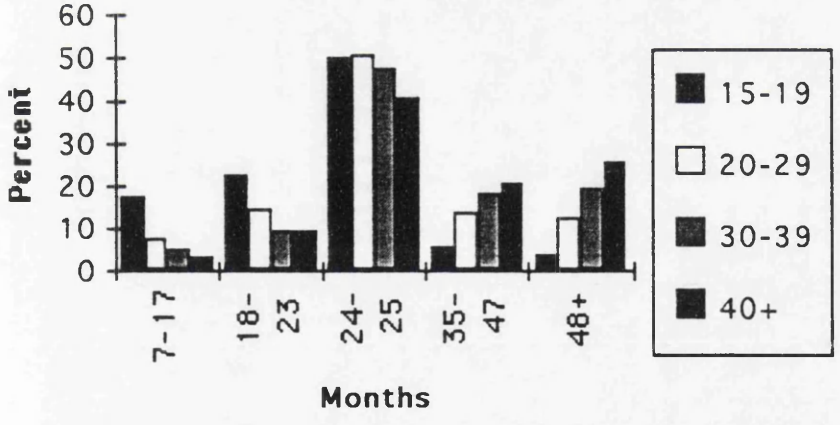
Note: Rates in parenthesis based on fewer than 250-499 cases.

It is observed from Table 15 that mortalities for all ages under five years is highest among women aged less than 20 years. Mortality is also highest among the first births, and this is where most of the teenage first births

belong. Thus, it may explain why mortality is high among birth order number one. Higher neonatal mortality rates for first-born children as indicated in Chapter two, are mainly due to low birth weight as studies have revealed that biological factors are more important in the first year of life. Environmental factors such as education, are more important after the first year of life. Weaning in the absence of the introduction of adequate nutritional substitutes for breastmilk, may result in sharply elevated risk of mortality. The fact that mortality under five years is high even after the first year of life among the offsprings of women under 20 years illustrated that teenagers are more affected by environmental factors than the older women.

The consequences outlined for mother and child intensifies when the original birth is followed by others within ten years. The Zambian teenagers do not escape this situation as is evidenced in Figure 4.

Figure 4 Percent distribution of births in the five years preceding the survey by number of months since previous birth according to age, Zambia 1992.



Shorter birth intervals by teenagers compared to other age groups is as a result of a lower use of contraception by teenagers compared to older cohorts and possibly also, due to lower duration of breastfeeding by teenagers and

hence they have a lower protection from amenorrhoea infecundability. A shorter breastfeeding period than that of older women, is another aspect of teenage fertility behaviour that endangers the child of a teenager, in addition to other outlined risks.

Other evidence of the vulnerability of children born to teenagers is revealed in the ZDHS. Diarroeal diseases in Zambia in 1988 ranked third among the ten major causes of hospital admissions and ranked fourth among the ten major causes of hospital deaths among infants under 1 year. Dehydration engendered by severe diarrhoea is therefore, one of the major causes of morbidity and mortality among Zambian children and hence knowledge and use of Oral Rehydration Salts (ORS) is very important. However, data from the ZDHS indicate that women belonging to age group 15-19, were less knowledgeable and the least likely to have used ORS (63.1 percent compared to 83.6 percent of women aged 25-29 used ORS).

5.1.4. Society

In Zambia, like most of the Third World Countries, social security benefits are not available, therefore, leaving the welfare burden to be borne by the family members of the affected teenager. The ability of families to provide all round support to the affected teenager, determines the short and long term extent of hardships, to which the teenager undergoes in her parenting. It therefore, means that, as Zabin and Hayward (1993) state, both the nature and strength of the family support system can have an important influence on the developmental course of a young person.

5.2. FEMALE POPULATION PROJECTIONS

Population projections of the female population in Zambia were made because the number of females determine the reproduction rate of the population. In addition, information on the various sub-groups by age have implications for planning, in this case health and other social requirements for the high risk population within the entire female population. The demand for the health and related services, like most other services, will largely be determined by the size and composition of the population. Of particular interest is the expected growth in the age group 15-19 whose high risk fertility behaviour demands heavy resources.

Table 16

Component projection: Zambian females, 1990, Mortality

Age group	Popn 1990	$_5P_x$	Popn 1995	$_5P_x$	Popn 2000
0-4	795017	.92231	902444	.92640	1014721
5-9	596262	.95442	733248	.98552	836024
10-14	437259	.96119	569084	.99166	722631
15-19	397508	.98716	420289	.98791	564338
20-24	357757	.98070	392404	.98182	415208
25-29	318007	.97768	350852	.97893	385270
30-34	278256	.97458	310909	.97601	343460
35-39	238505	.96883	271183	.97045	303450
40-44	198754	.96107	231071	.96290	263170
45-49	159003	.94904	191017	.95112	222498
50-54	79502	.93242	150900	.93475	181680
55-59	47701	.90589	74129	.90858	141054
60-64	31801	.86935	43212	.87249	67352
65-69	15900	.81057	27646	.81451	37702
70+	23850		12888		22518

The projections in Table 16 on the female population were based on a component method expressed in the following equation:

Population change = Natural Increase + Net Migration

The figures for the basic population of females (column 1) were obtained from the preliminary results of the 1990 census (CSO, 1990). However, this information was not available in five year age groups. Therefore, calculations of the population for the various age cohorts were based on the projected population for 1989 in the Fourth National Development Plan (FNDP), (GRZ, 1989). The projected figures appear to be quite reliable as the total female population in 1989 is close to the enumerated figure in the 1990 census, (3 957,300 and 3 975,083 respectively).

The 1990 female population is initially projected for five years and it is assumed that net migration is zero in every age group. This is mainly because international migration has not been reported efficiently and hence its role as a component of growth is still ill defined.

The mortality assumptions are based on the United Nations Life Table models for Latin America which are more appropriate to the economic and demographic conditions in Zambia. The particular Life Table function used is the Survivorship Ratio, (this is the probability of surviving from one age group to another). Life tables with a survivorship ratio based on life expectancy at birth of 55 years and 56 years were used for 1995 and year 2000 projections respectively This is based on the current life expectancy for females in Zambia and on the assumption that life expectancy will show little change in the 1990s because, as reported by the ZDHS, current levels of infant mortality are rising. The UN Life Table models appeared to be the more appropriate as they are based on empirical life tables from the developing countries. However, one cannot rule out possible element error inherent in the mortality

estimates and hence the results have be assessed bearing in mind these limitations.

Figure 5. Population cohorts using projections in Table 16 showing the female population structure for 1990, 1995, and 2000.

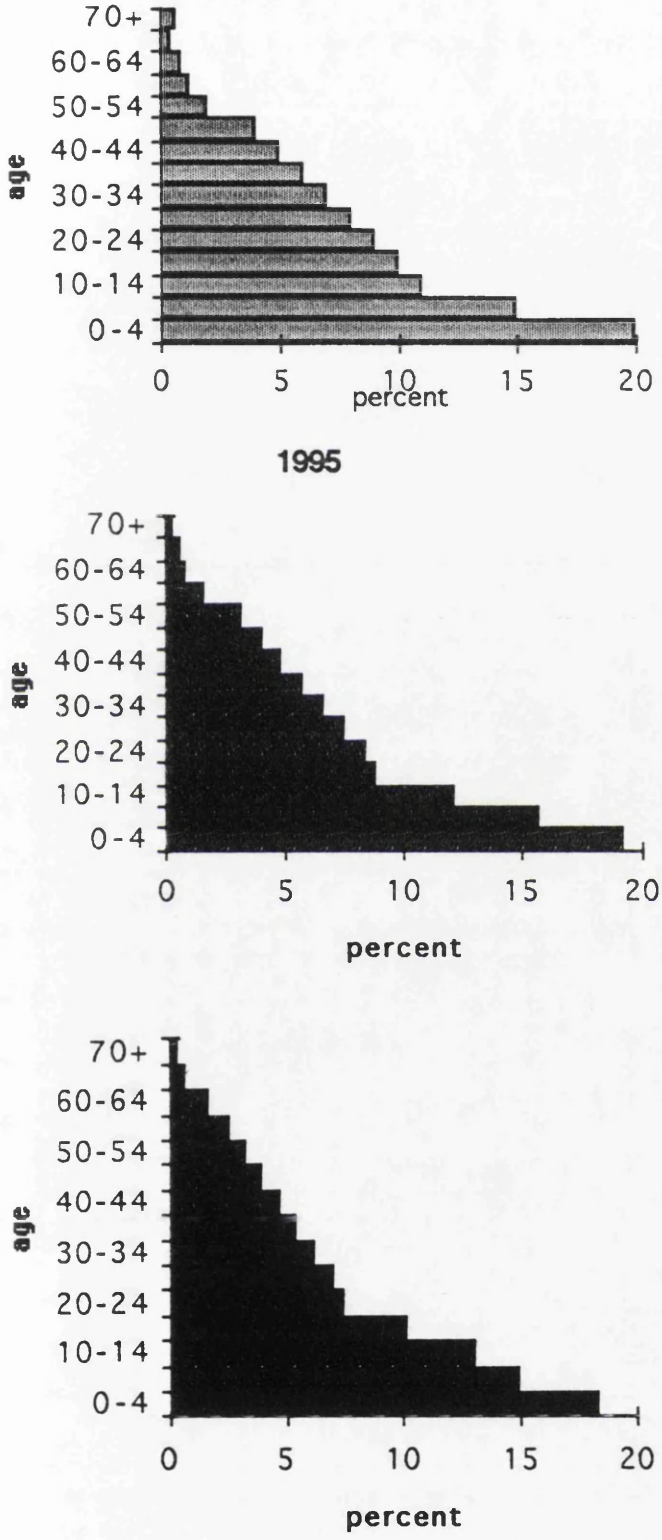


Figure 5 illustrates how the teenage population will increase as the younger cohorts progresses upwards. This will continue for a considerable length of time due to the inbuilt momentum at the base of the structure. Age group 15-19 is growing at a faster rate than all other ages within the childbearing age. At the present high rate of fertility within this age group, its growth in numbers may contribute significantly to a higher child mortality rate since it has been established that children born to teenage mothers suffer a considerably higher risks of dying during childhood than do chidren born to older women.

Table 17

Component projection: Zambian females, 1990, fertility

Age group	Female ASFR*	Female popn 1990	Female popn 1995	Ave- 1990-1995	Projected female births	Female popn 2000	Projected 1995-2000	Female births
15-19	0.074	397508	420289	408896	151292	564338	492314	182156
20-24	0.140	357757	392404	375081	262557	415208	403802	282664
25-29	0.129	318002	350852	334427	215705	385270	368061	237399
30-34	0.114	278256	310909	294583	167912	343460	327185	186495
35-39	0.092	238505	271183	254844	117228	303450	287317	132166
40-44	0.050	198754	231071	214913	53728	263170	247121	61780
45-49	0.015	159003	191017	175010	13126	222498	206758	15507
			2,167,725		981,548	2,497,394		1,098,167

*Assuming sex ratio at birth is 105:100

In order to project births (Table 17), under the assumption of constant fertility, the ASFR were multiplied by the average female population of childbearing ages at the beginning and end of each five year projected period. The age group here of major interest among females 15-49 is age group 15-19. TFR for this age group as observed from Chapter three did not change significantly (about 2 percent) between 1980 and 1992.

Table 17 illustrates how the youthfulness of the population presented in Table 16 will influence the proportions of births by teenagers to those of all women of childbearing age. It is observed that, the proportions of teenage population entering the childbearing population would increase by large proportions (5.4 percent between 1990 and 1995 and 25 percent between 1995-2000). The proportions of births by teenagers equally show an increasing trend, from 15.5 percent in 1995 to 16.6 percent in year 2000.

5.3. CONCLUSION

The need for intervention has been evidenced in the various risks associated with early childbearing to both mother and child. Teenage mothers are not only disadvantaged due to their age, but their situation is made worse by their socio-economic situation. This is mostly responsible for their low utilisation of the health services and other related services that would potentially reduce the risks, such as, immunisations and perinatal care. The population projections have also illustrated current youthfulness of the population will influence the numbers of teenagers entering the childbearing age and the total number of births by teenagers if their fertility is not checked.

CHAPTER SIX

CONCLUSION: IMPLICATIONS OF THE FINDINGS TO THE FUTURE NATIONAL POPULATION PROGRAMME.

The current study was carried out in order to show the level of teenage fertility, find possible explanations, show the consequences of teenage fertility behaviour and finally, assess the implications of these findings in the design and implementation of the Zambia National Population Programme.

The future National Population Programme (NPP) will be based on the objectives of the National Population Policy. One specific objective directly related to this study is to enhance the peoples' health and welfare and prevent premature death and illness especially, among the high risk groups of mothers and children. A number of issues have been identified that will need to be addressed if the programme is to achieve the desired results.

In Chapter two, it was established that the issue of teenage fertility is a common phenomenon in other developing countries. While, it was observed that generally, age at first marriage was increasing, premarital sexual activity was on the increase. It was also established that early childbearing was not a recent phenomenon, but that it currently attracts a lot of attention because of the context in which teenage childbearing occurs bringing greater challenges, these include:

- premarital childbearing which is on the increase;
- high unemployment among the youths;
- high school drop out rates; and
- new development policies that lessens government

commitment to provide social services.

In Chapter three, the association between youthfulness of the populations and high proportions of teenage fertility to that of the entire childbearing population in Zambia and Kenya was shown. The projections for Zambia's female population in chapter five further illustrates the expected increase in the number of teenagers that will be entering the childbearing ages. These large numbers of teenagers with large growth potential and currently having fertility levels that show an increasing trend will result in more births. Thus an increase in both the teenage mothers and their offspring will put more strain on the social and health services this high risk group greatly requires. Therefore, there will be need for the programme to adapt itself to the prevailing social and economic environment. Some inconsistencies in the current programme strategies of the National Population Policy with current development policy have been observed in the following strategies:

One of the strategies in the population policy document , for example, is aimed at 'formulating and implementing fertility regulation and family planning programmes within the context of the nation's health care and related systems'. Meanwhile, the current development policy in Zambia is based on an economic restructuring programme whose tool is total liberalisation and reduction in government intervention in the economy through free market mechanisms. The present government of Zambia has, like most governments in the world, started reducing its direct participation in the provision of health and educational services. Therefore, the NPP will have to be designed in such a way that it will be effective in a liberalised and low public expenditure economy. In addition, the low utilisation of some specific health services either due to inaccessibility or simply ignorance of their importance such as observed in Chapter five by the teenager, will

require special attention.

Another strategy for programme implementation that will require adaptation to current development policy relates to; 'expanding the coverage of family life education to all schools and higher institutions of learning so as to prepare the young people for responsible parenthood'. The change in the new government to cost shared education services within a situation of mass poverty may mean more of the young population not entering school. This will mean that a greater number of pupils will drop out of school in an earlier stage than in the past. There is a need for a study in the area of education, to find out the impact of school fees on the school going population. Although the government may have a political will to expand and improve education, it does not always have the needed resources to match the pace at which the school age population is growing.

The importance and positive impact of education on factors like health and fertility, age at marriage , childbearing, usage of contraception, and better care of children as highlighted in Chapter four cannot be overemphasised. While it is true to state that incomplete schooling is associated with teenage childbearing, it has been noted in Chapter four that the majority of childbearing occurs to those without education or with only minimal/primary education. Therefore, services delivered through schools with the aim of increasing accessibility, are likely to miss large proportions of the intended target group. There is need for specific programmes aimed at reaching the out of school youths.

Another aspect of programme strategy that has to be addressed is the high correlation between early childbearing and age at first marriage. In Zambia, it was observed that most of early childbearing still occurs within marriage suggesting that age at first marriage still influences age at first birth significantly. It has been widely recognised by most researchers, as noted in Chapter two, that age at which women marry has implication for both composition of population and levels of fertility. However, one of the observation that may bring undesired results, if programme initiatives do not pay particular attention to it, is the increasing premarital sexual activity outside marriage as age of marriage increases. This suggest that increase in age at marriage as a policy should be accompanied with other supportive programmes that will occupy the teenager in this lengthened period of exposure. Probably that is why those who are in higher education postpone their onset of both sexual activity and childbearing because they have an incentive to do so. Henry et al. (1979) notes that, ' many youths today face a new situation. In traditional societies, young people passed rapidly from childhood to adulthood. Girls married shortly after reaching puberty, but now, young people are facing longer periods of preparation for adulthood. While this long transition brings new opportunities and new challenges for young people, it also creates a difficult task for societies in meeting the socio-economic and health needs of these young people.'

The programme will also require to address itself to the related ills of early sexual exposure before actual conception occurs. It is increasingly being observed that, concentration on contraception and not on the actual activity that puts them at risk of pregnancy may underepresent the seriousness of all forms of infections a teenager may be exposed to even in the absence of a pregnancy. Henry et al. (1979) state that, ' sexual abstinence offers the only complete protection for young people against STDs and unwanted

pregnancy'. Therefore, studies should be done on teenagers who postpone initiation of sexual activity to see if something could be learnt from their experience that might be relevant to pregnancy prevention programmes because most research emphasis has been on those that have started childbearing.

Henry et al. (1979) also highlight another issue worth noting, this being the conflicting social pressure teenagers are exposed to. On one hand much in the environment promotes sexual involvement, for example models on the media, while, on the other hand parents, church, and social values in society discourages premarital and or extramarital sex. Other pressures that teenagers are exposed to include poverty, unemployment, and inadequate education. Means and ways should be explored that will enhance a coordinated effort by all major channels of influence in order to address such conflicts.

Regarding contraception for the teenagers, evidenced in Chapter four is the fact that low use among teenagers is also prevalent among the married teenagers. One would have expected that married teenagers, since they are in what is termed socially acceptable institution for sexual activity, would use contraception at higher rate than the unmarried teens. However, this is not the situation, suggesting that there are aspects of teenagers that require investigation that would explain low use even among the married teens. Another issue that needs to be addressed by the programme is the fact that older women in Zambia equally presents low use of contraception.The reasons for low use of contraception in this group may help to explain the equally low use of contraception observed in the younger women. Therefore, focus should go beyond reasons given by teenagers for not using contraception when designing intervention measures.

'Achieving a healthy society is not primarily a medical issue, but rather a political and socio-economic one'. Hence, the need to tie individual programme strategies to larger national strategies as overall development policies of the nation, will either facilitate or act as obstacles to the achievement of set objectives. Thus, the major challenges of the National Population Programme is to design a programme that will adapt to current development policy and meet such needs as would be required by a highly youthful population. The fact that teenage mothers and their children are disadvantaged in many, if not most, aspects of their lives will need attention for a considerable time.

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